IMPLEMENTATION TEAM CONFERENCE CALL
MEETING NOTES

July 24, 2001
PORTLAND, OREGON

1. Greeting and Introductions

The July 24 Technical Management Team/Implementation Team conference call to discuss a potential 2001 summer spill program was chaired by Brian Brown of NMFS and facilitated by Donna Silverberg. The following is a distillation, not a verbatim transcript, of items discussed at the meeting and actions taken. Anyone with questions or comments about these minutes should call Kathy Ceballos at (503) 230-5420.

Brown welcomed everyone to the meeting, then led a round of introductions and a review of the agenda.

2. Continued Discussion of Potential 2001 Summer Spill Program.

Gary Fredricks explained that, at yesterday's conference call, the TMT recommended the following summer spill operation: no spill at John Day, spill up to 40% of total river flow, with a minimum spill volume of 15 Kcfs, around the clock at The Dalles, and spill a minimum of 45 Kcfs and a maximum of 50 Kcfs for no less than five hours (preferably around the clock) at Bonneville Dam. With minimum powerhouse flows and miscellaneous flow requirements at The Dalles and Bonneville, that means total river flow must be at least 71 Kcfs at the former project and 84 Kcfs at the latter for spill to occur.

Any discussion of that operation? Brown asked. Was there consensus on the biological aspects of the 45 Kcfs minimum spill volume at Bonneville Dam? Guy Norman asked. I wouldn't say there was consensus, Silverberg replied – it would be more accurate to say that there was uncertainty and disagreement about the biological benefit or detriment that would occur at the 45 Kcfs spill level, or even below that level, at Bonneville.

Fredricks spent a few minutes describing the reasons for NMFS' concern about going below a 45 Kcfs spill volume at Bonneville; primarily, because of the poor stilling basin egress conditions that are set up under spill volumes of less than 50 Kcfs. NMFS' opinion is that a spill volume of 45 Kcfs at Bonneville represents a compromise; spill survival will almost certainly be lower at 45 Kcfs than at 50 Kcfs, but because some spill at Bonneville is crucially important to the tribes and others, NMFS is willing to live with a minimum spill volume of 45 Kcfs at that project, Fredricks said. If we go below 45 Kcfs, however, survival is a toss-up between turbine and spill passage, he said.

Silverberg noted for the record that, at yesterday's conference call, CRITFC did not support NMFS' proposed Bonneville spill operation. Instead, CRITFC favored an alternative under which any total river flow volume over and above the powerhouse minimum and miscellaneous flow requirements at Bonneville (about 39 Kcfs total) would be spilled, even if that meant a spill volume of less than 45 Kcfs. In addition, Silverberg said, Oregon, Washington and Idaho all favored spill on a daily basis at Bonneville. Concerns about adult fallback were also raised by the tribes and others, Silverberg added. Christine Mallette clarified that, at yesterday's conference call, CRITFC, Oregon, Idaho and Washington all expressed support for around-the-clock spill at Bonneville, even if the spill volume was less than 45 Kcfs, during periods when total river flow at the project is less than 84 Kcfs.

One problem, of course, is that we're in uncharted territory, Silverberg observed – the region has never seen July and August mainstem flows as low as they are this summer. The TMT has also discussed the feasibility of additional monitoring, so that the region can at least gain as much information as possible about the effects of spill under extreme drought conditions; unfortunately, it doesn't look as though there will be much of an ability to monitor the biological effects of a 2001 summer spill program, either.

The group spent a few minutes discussing exactly what was agreed to at yesterday's TMT conference call, with respect to the Bonneville spill operation; Paul Wagner said it was his understanding that, while the concerns noted by Mallette were indeed expressed, the TMT did not object to the proposed 45 Kcfs/five-hour minimum spill program at Bonneville. Essentially, he said, it was NMFS' understanding that the 45 Kcfs/five hour minimum spill program was acceptable to all of the TMT participants with the possible exception of CRITFC.

To clarify, Norman replied, Oregon's position is that, while we have no objection to presenting the 45 Kcfs/5-hour minimum spill program to IT, Oregon does believe there may be biological benefit to a spill volume of less than 45 Kcfs at Bonneville. There was no consensus, in other words, that the minimum spill volume at Bonneville should be 45 Kcfs, Norman said.

The discussion turned to the biological and flow conditions that might be expected to result from spill volumes of 45 Kcfs or less at Bonneville. Jim Litchfield noted that the Corps has provided data showing that the spill pattern that would be employed at spill volumes of less than 50 Kcfs would in essence set up a back-eddy back toward the base of the dam.

Fredricks explained that there is a 60-foot-deep hole below the spill bays at the center of the dam; at lower spill volumes, that hole cannot be flushed out, but instead attracts flow from the spill bays on the ends of the dam. The spill pattern to which Jim Litchfield is referring is intended to keep flows as high as possible along the shoreline areas to avoid setting up that eddy, Fredricks said; however, our concern is that, at spill volumes of less than 45 Kcfs, it isn't possible to do so. Fredricks added that this concern is based on 10 years experience with the WES hydraulic model of the Bonneville project.

In other words, said Brown, it sounds as though the minimum spill volume at Bonneville is a judgement call which NMFS is comfortable making, based upon our experience with the WES model, even though there was not consensus at TMT that the minimum spill volume at Bonneville should be 45 Kcfs. Howard Schaller observed that the real issue here is the tradeoff between forebay delay while no spill is occurring and increased mortality due to poor stilling basin egress conditions.

The next question, of course, is what Bonneville is willing to provide, in terms of a summer spill volume in 2001, Silverberg said. BPA's Therese Lamb first thanked all of the TMT and IT participants for their patience; it has been difficult to endure so many TMT and IT meetings in the past week, she said. However, this debate – and the opportunity to fully understand the region's system reliability status – has been extremely important to Bonneville, she said. BPA also appreciates all of the very constructive and creative suggestions in terms of avoiding system reliability and financial impacts associated with a spill program, Lamb said.

That being said, said Lamb, system reliability is still an issue of concern for BPA. We believe it is still important to manage to the storage levels; however, we think the opportunity to purchase energy in order to spill is something that can be implemented with limited effects on reservoir storage going into the fall and winter. BPA believes that summer spill will cause the system to draft more than it would if no spill was occurring, despite our best efforts to purchase power, Lamb said; how much is a grey area at this time.

BPA has also been looking at the financial and system reliability effects of the loss of WNP-2, said Lamb; financials are, frankly, something of a grey zone as well, but there should an opportunity to purchase enough power to allow a limited spill program to occur.

What BPA is proposing, then, is that we go forward with the approach of purchasing to spill, said Lamb; it would be a day-by-day decision, because we would be trying to make those purchases necessary each day to replace the amount of power that was spilled. BPA is comfortable with the following spill program, Lamb said: 30% of total river flow around the clock at The Dalles and five hours of spill at Bonneville on a best-efforts basis.

Lamb explained that total river flow at Bonneville is unlikely to exceed a day-average of 84 Kcfs any time in July and August. What we're willing to do, however, is to use the system flexibility at Bonneville to bump flows up to 84 Kcfs for five hours a day, then drop down to a lower total outflow for the remainder of the day, Lamb said.

To be clear, there may be some days when total river flow is too low to spill at Bonneville, Lamb said; however, we are willing to try to manage the system in such a way that we will attempt to do it on a regular basis. Lamb added that, once WNP-2 goes offline, it will likely become more difficult to purchase enough power to provide spill and to continue to refill to meet the 28,000 MW-month storage target, without spot-market energy prices going through the roof.

If BPA does begin to be concerned about the financial and/or system reliability effects of the spill operation, we will convene an emergency TMT conference call to discuss the situation, Lamb continued. Otherwise, we will simply plan to check in at the regular TMT meeting next Wednesday, August 1, to let you know how the spill operation is going, Lamb said. She added that the action agencies are willing to begin implementing the spill operation beginning this afternoon.

How long would the spill operation continue? Brown asked. I think the best thing to say is that we will check in routinely and see how things are going, from the standpoint of power purchase availability and pricing, Lamb replied. And the first scheduled review point would be next Wednesday's TMT meeting? Silverberg asked. Correct, Lamb replied.

What type of situation might cause BPA to convene an emergency conference call? Rob Lothrop asked. For example, if WNP-2 suddenly had to be taken out of service, BPA suddenly needed to purchase 1,500 MW of power, and that amount of power just isn't available, Lamb replied. We might also convene an emergency call if power prices suddenly jump to an extreme level, she added – anything near or exceeding the current cap of $92 per MW-hour.

Evidently you feel comfortable, then, that even if you implement this spill operation, BPA will still be able to meet the system reliability charges imposed by the Northwest Power Act? Stan Grace asked. Yes, Lamb replied; however, that is the reason that Bonneville has specified that this is a day-to-day operation – we need to be sure that there is sufficient power available to replace the energy lost due to spill. And since we are in a critical year, and teetering on the edge of system reliability, if the power system fails us, and, this winter, we enter a situation where reliability becomes an issue and there was structural damage done by, say, a large outage, would you be prepared to help mitigate that? Grace asked. I don't think that's something I can comment on here today, Lamb replied – what we're attempting to do is structure an operation that does not draw on storage reservoirs to support the spill program.

Grace and Litchfield raised the issue of the ability of the salmon managers to quantify the biological benefits of the proposed 2001 summer spill program, as opposed to Montana's ability to quantify the human effects of any power system outages during the generally more severe winters in that state. NMFS can certainly provide you with an estimate of the difference in survival between a scenario in which zero spill occurs at The Dalles, and one in which 30% spill occurs at The Dalles, as well as an estimate of the survival difference between zero spill at Bonneville and the proposed spill program at Bonneville, Brown replied. That would be very helpful, said Litchfield.

In response to a question from Norman, Lamb said the timing of the delivery of the five hours of Bonneville spill is a question for TMT to decide. In response to another question, Lamb said the proposed 2001 summer spill operation is not capped by the suggested 200 MW-months limitation – again, she said, we will re-evaluate the spill operation on a day-by-day basis, and it will continue as long as market conditions allow.

What is the reason for the five-hour spill duration at Bonneville? Bob Heinith asked. It was a combination of system flexibility and purchasing flexibility, Lamb replied. Are you saying that BPA is unwilling to consider a 24-hour spill operation at Bonneville Dam at anything less than a 45 Kcfs spill volume? Tony Nigro asked. As was mentioned previously, Oregon doesn't necessarily support the 45 Kcfs/5-hour minimum spill operation NMFS is proposing, Nigro said, and I think the discussion of spill alternatives at Bonneville which could also meet BPA's reliability criteria may have been somewhat short-changed.

We are primarily deferring to NMFS' judgement that the 45 Kcfs minimum spill at Bonneville really is the minimum, in terms of conveying a biological benefit, Lamb replied. That's correct, said Brown – the issue isn't really what BPA is willing to do, it's what NMFS is willing to do, and apparently the Corps is in agreement with that as well – again, we simply don't believe that the in-river conditions that would exist under spill volumes of less than 45 Kcfs will provide a biological benefit.

The group discussed the evidence (and lack thereof) associated with the relative biological benefits of an intermittent 45 Kcfs minimum spill at Bonneville and a lesser spill volume provided over 24 hours. Ultimately, Bill Maslen observed that these concerns and arguments have been extensively aired over the past week of TMT and IT meetings, and that, in his opinion, there is little to be gained by rehashing them again.

To be clear, then, at Bonneville, the only choice we're being given is the five-hour spill operation or no spill operation, said Nigro; at The Dalles, we're now talking about 30% spill. I thought the TMT had discussed a spill volume in the range of 30%-40% of total river flow, so I'm concerned that the volume has now been capped at 30%, he said. Lamb replied that BPA's concern is that the agreed-upon spill operation be something that is sustainable within the marketplace. In addition, she said, it is unlikely that we will be able to reach a total river flow volume in July or August under which the 40% of total river flow spill volume is even in the realm of possibility.

In response to a question from Litchfield, it was reiterated that a total river flow of 71 Kcfs is necessary for the minimum spill (15 Kcfs) to occur at The Dalles. In response to a question from Scott Corwin, Lamb said that, at this point, the only thing the action agencies can do to affect September 30 reservoir storage elevations, and whether or not the 28,000 MW-month October 1 federal storage target is achieved, is to operate the system to provide minimum powerhouse and miscellaneous flows, and to save as much water as is currently stored in the system as possible. Beyond that, said Lamb, all we can do is hope that streamflows are better than forecast.

If we add a spill program on top of that, Lamb said, if we provide the agreed-upon spill levels, we will need to purchase an equivalent amount of energy. To be clear, she said, when WNP-2 goes out, BPA will have to be able to purchase enough energy to offset both that generation shortfall and the spill program.

Doug Arndt said the Corps is willing to implement whatever spill program is agreed to today. Various other participants, including Jim Fodrea of Reclamation and Bill Tweit of Washington, expressed their appreciation for the dedication of the various participants in this ongoing dialogue. Litchfield reiterated Montana's concerns about the quantifiability of the biological benefit of a 2001 summer spill program, particularly with respect to increased harvest opportunities three to four years hence, vs. system reliability detriments in the winter of 2001/2002. To my mind, he said, we're faced with a confusing set of tradeoffs, and we probably don't have all the information we need to make this decision on the table.

Lothrop said that, in his opinion, other river users, such as commercial navigators and irrigators, are not being asked to make the kinds of sacrifices the salmon are being forced to make this year. I am very uncomfortable with the idea that a decision about whether or not fish will be sacrificed if the price of power reaches a certain threshold will be made day to day, Lothrop said. We don't do that with flood control, irrigation or navigation, he said. There are reasons for that, said Lothrop; regardless of your views on the validity of those reasons, it is troubling that there is a different set of rules for fish.

Norman said that, to clarify Oregon's position, spill should occur at volumes above the powerhouse minimums at both The Dalles and Bonneville Dams this summer. If, however, we had to choose between 30% spill at The Dalles and five hours of spill at Bonneville, we'll certainly accept that choice as something that can contribute to maximizing the benefits to the fish remaining in the system, said Norman. In other words, said Norman, Oregon will accept NMFS' proposal, but our preference would be to exceed those minimum spill levels if possible.

It sounds, then, as though the 2001 summer spill operation, as proposed by Bonneville, will move forward, although there is a clear preference for additional spill on the part of the tribes, Oregon, Washington and Idaho, Silverberg said. It should also be noted that Montana does not support the 2001 summer spill program. It was agreed that NMFS, the Corps and BPA will discuss the exact time the spill program will begin tonight. To be clear, however, it was agreed that spill will begin at both Bonneville and The Dalles later today, as long as the minimum total river flows are exceeded at those projects. Meeting notes prepared by Jeff Kuechle, BPA contractor.